## The Danger of Degeneracy.

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The development of civilisation at the present time in Europe affords anything but an attractive picture. The reasons for this are many. Some of the most important will be dealt with in this paper.

Materialism in "a machine made world," begins to make itself felt in a very disquieting manner. There can be hardly any doubt that both ignorance and egoism have driven us into a blind alley from which we must find a way to return, to strike out new paths which will lead upwards towards real improvement, and not downwards towards the ruin and destruction of the race.

Our greatly increased knowledge, respecting formerly unknown powers of nature, has opened the way to possibilities in obtaining material advantages and greater riches from the land, the mountains, the forests and the air. Improved means of communication, industry and commerce have hastened this process. The temptation has been great to enter into the enjoyment as soon as possible of the good things of this world in the form of money, property, shares and securities of all kinds. The outward conditions of life (environment) had been considerably improved before the great war came. A life full of ferment and excitement has arisen, but ideals of enormous value have gone under. The race, the efficiency of the race, has deteriorated. Degeneration spreads quickly around, takes fast hold and expresses itself in the worship of mammon, love of pleasure, degradation, vice and crime.

But it is not selfish motives alone which have been leading the people, ideal motives have also been present. It cannot be denied that in many departments real progress has been made, but in spite of this. the ignorance and fanaticism of the masses has not seldom upset us into the ditch instead of helping us forward. Very extensive movements among the people of a social, political and religious nature have taken place, working for their improvement and making powerful contributions towards it, which undoubtedly have had good results in some cases, but often the reverse, because the starting point has been a false one. On this account expectation has not always been fulfilled. Theories which philosophers, pedagogues, sociologists and politicians have striven to work into the thought-world of the more or less uncritical masses of the people have proved themselves upon a nearer examination to be wrong. Such erroneous opinions have been leading development into by-paths and begin to show disastrous consequences for the race and people. Among the obvious false opinions of this kind may be mentioned the belief in the omnipotence of environment and the inner similarity of all mankind. Further the certainty that

<sup>\*</sup>This article has been received from Professor Lundborg, the distinguished Director of the Swedish State-Institute for Race-Biological Investigation, an account of which appeared in Vol. XIII, No. 3 of the Eugenics Review.

acquired qualities are inherited; all of these are questions which modern investigation refuses to accept without further knowledge.

We ought not to forget either that different strata of society are of different race-biological value, as a rule it is greatest in the sound middle-class and lowest in the bottom stratum. The cultivated leading layer, which forms the upper class, is on account of its low birthrate of decidedly less race value than the middle class, although the contributions of the former towards culture are considerably greater.

The very best environment has no power in itself to raise a bad or unfit race of people, as for example, gipsies or negroes, and it is in the same way impossible to raise in civilised societies the deepest sunken bottom layer, i.e., habitual criminals, vagabonds, imbeciles (individuals deficient in gifts). These often suffer from defects, the result of hereditary conditions, upon which improvement in the environment has no or very little influence.

The consequences of such a process of layer-building, by which the best equipped individuals (or bio-types to call them by their scientific name) disappear and are replaced by lower ones, who have not the corresponding power to take a leading social position, is evidently not only a deterioration of the race from a biological point of view, but in this manner a retrograde movement is also brought about in the ability to receive culture.

The false humanity, which inspires so many people at the present time, doubtless hastens this process, so unfavourable for development, which we call contra-selection (selection in the wrong direction). Good-hearted men and women often help forward without any distinction persons who are both physically and mentally feebly equipped, who afterwards propagate themselves and pass on their inferior qualities in inheritance to new generations, which in turn become a burden on society. In this way they add to the load of coming posterity.

The law-maker who does not look deeper into the thing than this is doomed to failure. We have already in all civilised countries laws enough that bear witness to gross biological ignorance. I should like in connection with this to quote the following utterance of Professor Hultkrantz in Uppsala: "We can never get away from the eternal elementary laws of life, and therefore it holds good that we must take care before everything that our own written laws do not come into conflict with these, but are instead the best possible application of them that we can make. It is on the quality of the human material that a nation's future development depends. We must constantly keep the eugenic point of view before our eyes, if we wish our struggle to be not only of use for the moment, but also a blessing and not a curse to the coming generation. The individual disappears, but the race lives on, any violation of its interest ought to be looked upon as a sacrilege." May we also strive after a deeper knowledge of the laws of nature and afterwards apply the experience regarding human life thus won not only to ourselves, but also—and not least—to our posterity.

We are taught by Mendelism that the germ-plasm in living creatures is composed of a great number of hereditary factors, "genes" (probably there are thousands or more in a human being).

Parents belonging to the same family or race, have in their germ-plasm many identical genes. This does not prevent every individual from also having within himself a number of genes unlike those of other individ-The sum of these altogether forms the distinguishing mark of the individual in question. The combination of the genes in man and wife are therefore always more or less dissimilar. For every child that is conceived the genes are combined in a different way (if one excepts twins\* produced from the same ovum, who are equipped alike genotypically). In this way and influenced to some extent by the environment, different constitutions arise (individuals, personalities). The genes are to be taken as the building material itself. The frame work. the structure are given in and by conception. An individual belonging to a specified definite race receives in inheritance many characteristics both external and internal which distinguish the race in question and differentiate it from other races. Thus for example, every person knows that parents of Nordic race do not have children resembling negroes or Japanese, nor is the reverse the case. Selection (in combination with environment) has during the course of thousands of years effected this. Strong potent force lies without doubt in biological inheritance, which is much more powerful than the accidental influence of environment which affects the private individual during a more or less extended period of time. In and by the process of mating the future possibilities of development in the coming individual are to a large extent decided according to established laws. It is therefore of decided consequence for the child as to how the germ-plasms, which it receives from both father and mother, are constituted.

If these are of good quality a talented and biologically well-born person is the result; if again they are bad, a stupid or degenerate individual is produced. No human power can make any alteration in this fact, for we cannot—no teacher or doctor is capable of doing it—re-create the material and the force that are bound up in the hereditary substance. With the best will in the world we cannot therefore produce new traits. It is not possible from imbeciles, who have received their weak intelligence in inheritance (and they are many) to make human beings of full value no matter how good a bringing-up and education we may give them. All the gold in the world is not capable of doing anything in such cases. Just as little can we of an easily led and weak-willed human being, who has inherited these qualities, make an energetic resolute person. In other words we cannot alter the laws of nature, i.e., in this case heredity; we cannot even sway these powers of nature, we could just as easily annihilate the law of gravitation.

But in the meanwhile it must not be thought that environment, education and good conditions of society are worthless. That is far from being the case. That would be to go from one extreme to the other. We must not forget that bad conditions in the environment, and an unsatisfactory up-bringing may ruin even those with good

<sup>\*</sup>Most twins—all of a different sex and even a great many of the same sex—are not produced from the same ovum, but are produced from two different ovas Twins produced from two different ova are not more alike than ordinary brother. and sisters, but twins produced from one ovum are similar in the highest degree.

instincts, or at least fail to bring out the best that is in them. If they happen to be placed in such difficult and degrading circumstances that they die early or have no opportunity of building a family their good "hereditary mass" is lost in and with themselves and this must be considered as a national loss. Good conditions in the environment can also help naturally to straighten out in some degree that which is crooked. But the environment does not create anything new, it can only modify, in a good or bad direction, the disposition which we have inherited.

People having the same descent both on the father's and mother's side are as a rule developed harmoniously; the genes that form the foundation of their bodily organ and organic system in such cases suit one another as a rule very well. Marriages between people of the same family and tribe are therefore advantageous. It is only in degenerate families that such marriages give bad results. Race-mixtures between every nearly-related efficient nation are also good.

Extreme inter-marriage as well as its opposite extreme, too much blood-mixture, have on the contrary unfavourable effects in the long run, although of quite different kinds. In the first case the number of the homozygotes is increased, in the second case the number of the heterozygotes, that is to say, in every day language, intermarriage breeds a too great monotony, while unchecked race-mixture causes too

great variation and often pure disharmony.

ous conditions within the world of animals.

A people who always inter-marry show therefore very evident outward and inner similarity. Little by little the feeling of solidarity increases, but at the same time it degenerates into strong caste feeling, chauvinism, and self-worship. Reactionary modes of thought spread themselves around. Such nations are marked by their archaism and senility. Many examples both from former times as well as at the present could be brought forward to show this, e.g., the caste system of the Hindus and the rigid formality of the old Jews. The conservatism and unexampled caste spirit of the true gipsies comes certainly from the same cause. In the same way we find that the inhabitants of isolated islands, Tasmania for example, and as far as that goes the whole of Australasia, give, before the penetration of Europeans, a picture of people lagging far behind, not only from a biological point of view, but also as regards their culture.

Individuals and nations that arise from a great mixture of race are as a rule very disharmonic. The different traits do not suit each other particularly well. A "mixtum compositum" is formed of a not very attractive nature. Only in certain exceptional cases can a genial (but at the same time bizarre) personality appear. The variations in such a nation increase over and over again. The result is not only a lack of correlation (agreement) between the different organs and organic systems in one and the same individual but also an altogether too great dissimilarity between the different individuals among themselves, which causes a lack of the feeling of solidarity. We find quite analog-

In such cases—whether in regard to human beings or animals or even plants—the constitution so to speak suffers shipwreck. The power of resistance towards sickness and other dangerous factors is diminished, which is shown by increased mortality. The sexual tendencies are increased; immorality, love of pleasure, vice even and crime arise and stamp their character upon society. Dis-union, quarrelling, uproar and revolution result sooner or later. Civilisation sinks downwards. We find such conditions in the greater part of Central and South America where a regular chaos of blood is to be found on account of the fact that during many succeeding generations a race mixture between Indians, negroes and whites (Indo-Europeans) has been taking place. The circumstances in Eastern Europe and in many parts of the Balkans (Europe's unruly corner) also furnish us with another example of the same kind. In a less degree and not quite so plainly one can observe the same phenomenon taking place in big cities, in industrial centres, in gold mining camps, etc., where people of different races collect and cross-breed. Such places are seats of real The country-side with its purer bred population race-corruption. shows us as a rule a far brighter picture.

It must be evident to everyone that a true national stock is a country's greatest riches. How different things would appear everywhere in all the civilised countries if this principle was not only believed

in but was also lived up to.

can compare nations and races to a tree, whose branches represent the different national families. Some grow luxuriantly while others become dried up and are blown down. weakest races die out. Stronger nations take their place and so it goes on in endless repetition. Without any doubt the forms of life in the world develop gradually during the course of thousands of years. The same thing happens with regard to the human race. The better organised nations do not remain in a savage State, but little by little introduce better conditions of society, a fixed judicial law, a less despotic constitution, in a word, a higher culture. Such things are not brought about as people in general believe by the more highly civilised nations imposing by hook or by crook their civilisation, their religion, the constitution of their state, etc., upon the nations of lower status. In this way one can possibly bring about an outward veneer, which however cracks as soon as it is put to the test. Culture is the expression of a nation's innermost being, and it cannot be altered or changed as easily as one changes a coat. Feebly equipped nations have a low civilisation, vigorous nations again have a higher one. We cannot make any essential alterations in this matter. We may strive as much as we are able but still in the long run we shall not succeed (even with the best environment we can imagine) in keeping alive a dying race, as for example, the Tasmanians or Australian negroes. We might just as well attempt to make anyone immortal. So the forms of life change, and in connection with these the forms of civilisation. Degeneration and extinction are taking place ncessantly on the one side, and on the other development and uplifting. Taken as the whole one may say that progress triumphs. The stronger nations spread both The wish to proclaim the "status themselves and their culture. quo" principle between nations is an absurdity which struggles against immovable biological laws, which govern both us and all life to be found in the world. We might just as well command the earth to

stand still or all life to cease. The inherent powers of nature assert their rights independently of the more or less short-sighted assertions we are pleased to set down upon paper and declare valid.

No nation continues unchangeably the same during the course of time, it develops and improves, or it deteriorates and degenerates. Many factors are working towards this. One among the most important, which at the present time owing to mass-emigration, trade, commerce, war, etc., makes itself felt very strongly, is the unchecked mixture of blood between different peoples, which has been previously mentioned. This cannot take place without disaster in the long run.

Development in a certain direction in Europe has taken place at a

rapid rate during the last hundred years.

Means of communication, trade, commerce and other forms of occupation bear witness in an unmistakable manner to this. population of Europe has more than doubled itself during the 19th century, the mortality has diminished, thanks to considerable improvement in the environment, the average length of life has also To many this appears to offer bright hopes, but increased. etc. there is undoubtedly a reverse side which is correspondingly dark, so dark that people here and elsewhere are beginning to be very mistrustful of the future of European nations. The conflagration which has raged throughout the world, and is not yet really quenched, has certainly opened the eyes of many to the fact that in spite of all the improvement in environment it is not altogether as it should be with our modern civilisation. It is not possible to ignore the fact that the people have been made proletarians—in a biological sense—during a few generations to a very alarming degree.

In a government motion in this year's Swedish parliament the Minister for Education (B. Bergqvist), in giving the motive for His Majesty's proposal to found a Race-biological Institute, illustrates

just this point among others:—

"It is doubtless quite clear to everyone, who is awake to certain circumstances and phenomena of the time in which we live, that we cannot help feeling anxious about the future of civilised nations. At the centre of the many powerful forces which are at work to improve and ennoble the human race, many regrettable and dangerous conditions show themselves which threaten to undermine and annihilate the work of these forces. The struggle between these contrary currents is not a new one, but we in our time ought to feel more strongly the danger of letting the destructive elements do their work, without making any attempt to counteract them. The significance of the self-denying aspect of culture is seen more clearly when it is placed side by side with the advance of civilisation. At the same time that the welfare of the people, taken on the whole, is improved, the mortality decreased, the average length of life increased, etc., they are threatened by a deterioration of race. The vigour of the race is destroyed, which is too dear a price to pay for the advantages gained by the high standard to which our material and mental culture has attained.

For some time, however, endeavours have been made to counteract the above-mentioned destroying forces. But up to the present time they have been chiefly directed towards the more easily accessible tasks. which lie nearest to hand, in improving the outward conditions of human life, the social environment, or in directing attention to the symptoms which the faults of these conditions have made apparent in the world. With every appreciation of what has been done and is being done in this way, one has had one's eyes opened to the fact that no real decisive victory can be won, by these means only, against the evil one is fighting. One does not rely any longer on the effect of improved conditions of environment. The fact of the importance of heredity in the continuation and improvement of the race is at last coming into prominence and getting recognition.'

Many people—I am sorry to say—begin by regarding their own individual life as being the only thing that matters, instead of regarding it as an inheritance held in trust, for the guarding of which they are responsible in the eyes of their posterity as well as of their forefathers. This arises from an individualistic view of life, having its foundation in a certain over-estimation of their own value and an exaggerated

claim to the right of enjoyment.

The 'policy of the empty cradle' is gradually making headway. This system of having no children or only one or two in a family is steadily becoming commoner, and, from the stand-point of race, must be deprecated when it is realised that it has been adopted by the more valuable race-elements.

The future of the family and the race must be safe-guarded. so very long ago, when the resources of food and nourishment were very scanty on account of the war in Europe, every country was obliged to introduce rationing of the means of life, in some form or another to avoid a catastrophe in the form of actual starvation. One can ask one self: when will the wounded and bleeding nations, in our quarter of the globe, be forced to economise in a better way than heretofore with the race-material that they own and to take care that the necessary recruiting of good blood is effected? At the present time in the greater part of Europe there is a dreadful waste in these respects, which make a sad impression on all those who have learnt to see clearly the wrong we are doing to those who will succeed us. The nations, who no longer understand the value of healthy and strong children but prefer to live an egoistic life without them, are not worthy of sustaining the fight of competition; they must go under and make room for other nations who are conscious in a higher degree of their duty and of the demands made by nature.

Until more recent times the Swedish nation has lived in poverty, but there has been no lack of children in Swedish homes. The majority of these have been obliged to make their own way, and yet we have been able up to the present to vindicate our equality with other European nations, both physically and intellectually. Will this continue? Hardly, not at least if we continue to follow the dangerous pathway we have now entered upon. The luxurious mode of life and the sinking birthrate in the well-to-do classes betokens nothing good. Added to this we have a spreading industrialism which helps forward the work of corrosion.

A nation, which does not increase in numbers, must degenerate. Within my knowledge no historical example is to be found of a people,

showing a larger percentage of deaths than births yearly, which has been able to recover. It is going to meet its doom.

If our own mothers and grandmothers had practised the system of having only one or two children to the extent that it is now practised in France and in a great many Swedish homes, the larger number of the bearers of civilisation in this country would never have seen the light of day. They would have been smothered already in their mothers' wombs. One sees this best if one goes through any large genealogical work. Still it is not strange, that such a doctrine, which actually makes a virtue of comfort and egoism is embraced by many with enthusiasm in these days.

Not to be misunderstood I must here explain that I do not of course consider an indiscriminate "rabbit-like production" within the sphere of humanity to be in any way desirable. But I dare to assert most decidedly that healthy efficient parents in fairly good circumstances commit a crime against nature and against their own race, when they are content with only one or two children, while the most feebly equipped lower strata among the people continue to increase in large numbers.

The State authorities have certainly a heavy responsibility in the circumstances just mentioned in that they do not sufficiently support the most worthy element in the nation in their wish to build homes and keep up their families. Our individualistic epoch shows much greater consideration for the "rights" of the private person, and takes little thought of the position of families and of the race taken as a whole. At the present time one might almost say that a war of extermination is being carried on against families and children, and in this the authorities often set a bad example. The wage question, the shortage of dwelling-houses, the hard times and other things help to undermine the existence of families. Can one under such circumstances expect that the race in the long run will be able to keep up its vitality or power of competition? We must wake up and learn to understand the perils of such a system.

From what has been said, it is evident that the position of civilisation and the development of society, in Europe and our own country, are very far from satisfactory at the present time.

One is forced to ask wherein does safety lie? For surely the human race taken as a whole can hardly be doomed to destruction.

The answer to the question is this:—We must to a much higher degree than in the past preserve the genotype, i.e., we must work more for the tribe and race than is done now. The private individual must learn to accept this and be willing to make real sacrifices for the sake of posterity, as our forefathers have in the past. The individualism of the present day is certainly not inclined towards this but an altogether new epoch is approaching which may prove to be a turning point in racial history.

It is absolutely necessary to penetrate as far as possible into the laws which the science of heredity has made the subject of its studies. We must gradually learn to order our lives according to these laws. As the matter stands we have too much evidence of what happens when a nation neglects them. In the meanwhile it is not right to hold the

belief that these laws are exclusively stern avengers. Rightly understood and practised they form an almost inexhaustible source of inspiration and advancement.

Thus it becomes the work of investigation to lead the way here, as in other fields of labour. Hand in hand with this work a rational

system of enlightenment ought to be carried on.

The modern science of heredity and the still younger biological branches, race-biology and eugenics work diligently to investigate the natural laws which govern nations and races. Our knowledge increases incessantly. One is concerned in saving all that can be saved, so as to be able to build up a stronger and better race. With the statesmen, politicians and scientists leading the van every good citizen in every country ought, according to his powers, to help in this work.

Great race-biological institutes, well-equipped for the work of investigation must be established in all the civilised countries. The instinct of self-preservation will quite certainly compel this sooner or

later.

The Swedish parliament has quite lately granted the means of establishing such an institute. In England and America such institutes are already to be found. In these countries the means to support them have been subscribed by private persons who are patrons of science. In the meanwhile no other civilised country has advanced so far that a race-biological institute has been endowed by public money. Here Sweden has the honour of leading the way.

One has a perfect right to entertain the firm conviction that a people, who learn in time to understand the importance of heredity and race, and who are willing at the same time to submit obediently to the natural laws that govern humanity, must advance triumphantly in the world not with the ravages caused by war, hunger and sickness in its track, but leading the way to a higher civilisation, a wider and deeper

morality and a happier human race.